sider it the drug of choice, now to be used in preference to paraldehyde, especially in children. For severe and intractable seizures, intravenous slow drip of 100 mg and 500 ml of normal saline solution is recommended with the total dose initially being 10 to 15 mg per square meter of body surface. The most significant side effects are moderate hypotension and mild respiratory depression, both most commonly seen in adults and in conjunction with barbiturates or paraldehyde. Diazepam has also proved useful as an oral adjunct with other drugs in the long-term control of convulsive disorders.

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Growth Retardation in Environmental Deprivation

Environmental deprivation is perhaps the most frequent cause of growth failure in infancy. In older children it is less frequent as a cause of growth failure. If careful history taking, careful physical examination and simple laboratory testing (blood cell count, urinalysis, serum urea, protein-bound iodine) fail to reveal an organic cause, environmental deprivation should be considered. Infants with mental retardation may not grow adequately whether they are deprived or not. Admission to a hospital may be necessary to determine if an infant can gain weight if adequately nourished and cared for. Testing should be held to a minimum during this time.

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Intravenous Alimentation

Nearly complete alimentation can now be accomplished intravenously for long periods of time. This technique requires the placement of a silastic or polyvinyl catheter into the right atrium via the jugular, subclavian or femoral veins. In the right atrium, the large volume of blood flow will immediately dilute the hyperosmolar solution of 25 percent glucose, 4 percent fibrin hydrolysate, required electrolytes and vitamins. The volume of infusion is equivalent to the maintenance water requirements and should be given at a constant rate with a pump. The maximum rate of glucose utilization is 1.3 grams per kilogram of body weight per hour. A Millipore filter in the line will remove particulate matter and microorganisms. Essential fatty acids and trace metals are supplied by transfusion of plasma twice weekly. Improved survival has occurred in patients who are unable to eat because of prolonged ileus, chronic diarrhea, intestinal fistulae, peritonitis and sepsis. Complications include septicemia (particularly *Candida*), venous thrombosis and, rarely, pulmonary embolism. This technique of parenteral alimentation is one of the most important medical advances in many years.

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Drug Abuse

The most common mind-altering substances being abused by youth today are the hallucinogens, amphetamines and barbiturates. The hallucinagenic substances hemp (or marijuana), lysergic acid diethylamide (LSD), peyote, and mescaline all produce acute panic reactions, recurrent hallucinations, and serious psychotic change with varying frequency, but most commonly with LSD. Such untoward reactions with marijuana use are more rare due to the low content of the active

ingredient, tetrahydrocannibinol, in the material most commonly available. Methamphetamine, because of the rapidity with which dependence and tolerance develops and because abuse produces a chronic brain syndrome, is certainly the most dangerous drug being abused by young people. The oral use of dextroamphetamine, which is more common in high schools, is often followed by a shift to methamphetamine. Barbiturate use is also common in the high school ages and represents an introductory move toward further experimentation with chemical solutions for life's problems.

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ADVISORY PANEL SECTION ON PEDIATRICS